

A COMPARATIVE STUDY OF THE KARYOTYPES IN TWO SPECIES OF MUD LOACHES

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Misgurnus anguillicaudatus and *Paramisgurnus dabryanus* are two common species of mud loaches in Hubei Province. A comparative study of the karyotypes in these two species was carried out with particular considerations on their taxonomy and evolution. The Chromosome preparations for this study were made with short-period PHA-cultured kidney cells in vitro by the air-drying method and Giemsa staining.

Misgurnus anguillicaudatus has a diploid chromosome number of 100 with a fundamental arm number (NF) amounting to 128. Its karyotype comprises 8 pairs of metacentrics, 6 pairs of submetacentrics and 36 pairs of telocentrics. *Paramisgurnus dabryanus* has $2n=48$ with NF=64, which consists of 6 pairs of metacentrics, 2 pairs of submetacentrics and 16 pairs of telocentrics. But cells containing $2n$ of 49 with NF of 65 were also found in some individuals collected from sha shi market. No sex chromosome was found in these two species.

Basing upon the above mentioned results of karyotype analysis, one may well consider *Misgurnus anguillicaudatus* as a tetraploid fish which has been formed through a spontaneous polyploidization of chromosome complements from $2n(=50)$ to $4n(=100)$. Thus, the $2n$ of the primitive species should be 50. In fact, the $2n$ of the Japanese mud loach *Misgurnus anguillicaudatus* was reported to be 50, which has not been found in China. Regarding the karyotypical differences between *Paramisgurnus dabryanus* ($2n=48(49)$) and the supposedly primitive species ($2n=50$), it might be due to some structural rearrangements such as Robertsonian translocations among chromosomes of the primitive form, which had occurred in the course of karyotypical evolution, resulted in the reduction in chromosome number. A smallest supernumerary chromosome found in *Paramisgurnus dabryanus* is probably a chromosome. Further studies, however, are needed to substantiate all these propositions.

异色瓢虫重名变种在云南的发现

DISCOVERY OF LEIS AXYRIDIS VAR. AXYRIDIS PALLAS IN YUNNAN PROVINCE

异色瓢虫 *Leis axyridis* Pallas, 属鞘翅目 (Coleoptera) 多食亚目 (Polyphaga) 扁甲总科 (Cucujoidea) 瓢虫科 (Coccinellidae) 异色瓢虫属 (*Leis* 或 *Harmonia*)，是蚜虫的主要天敌之一；分布于苏联阿尔泰山脉以东的广大地区，以及我国、朝鲜、日本等地，故又称亚洲瓢虫。